

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Kinyo Virginia, Inc.
Newport News, Virginia
Permit No. TRO-61085

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Kinyo Virginia, Inc. has applied for a Title V Operating Permit for its Newport News facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date: May 8, 2006

Air Permit Manager:_____ Date: May 8, 2006

Deputy Regional Director:_____ Date: May 8, 2006

FACILITY INFORMATION

Permittee

Kinyo Virginia, Inc.
290 Enterprise Drive
Newport News, Virginia 23603

Facility

Kinyo Virginia, Inc.
290 Enterprise Drive
Newport News, Virginia 23603

AFS ID No.: 51-700-00091

SOURCE DESCRIPTION

SIC Code: 3069, NAICS Code: 326299 – Production of offset printing blankets for use on printing presses.

The primary manufacturing steps include mixing pelletized rubber with solvent to form a coating material, application of the coating material on web substrate, and subsequent drying and curing. The facility operates four coater/dryer sets. The coating and drying operations take place in permanent total enclosures and emissions from these areas are vented to a carbon adsorption system that serves as a solvent recovery system. The rubber and solvent mixing operation is conducted in covered vessels with emissions also vented to the carbon adsorption system. The items affected by the emissions standards include coating and drying equipment, curing ovens, containers used for mixing, storage, and conveying coating materials and waste materials generated from the coating operations. Toluene is the primary solvent used and HAP emitted from the facility. Substantially lower quantities of methyl ethyl ketone emissions may also occur.

The facility is a Title V major source of VOC's (HAP). This source is located in a non-attainment area for ozone and is a major source. The facility was previously permitted under a Minor NSR and NSPS Permit issued on August 8, 2001 and contains an amended page from February 11, 2002. A new surface grinder was installed and permitted on June 1, 2005. Kinyo is also subject to a MACT regulation: 40 CFR Part 63, Subpart OOOO. This MACT focuses on the control of VOC and HAP emissions from the rubber blanket process. Kinyo has selected the emission rate compliance option and is prepared to show compliance by the May 29, 2006 deadline.

Applicable Requirements for Title V Renewal

During the years since the original Title V permit was issued, Kinyo has shutdown the plant for the Rubber-Coated Roller Process and requested that the permit for that plant be rescinded. The request for rescission was received on September 14, 2001 and after reviewing all of the information submitted, the letter of rescission was issued October 2, 2001. In the case of the Rubber Blanket Manufacturing plant, a current New Source Review permit remains in-force and is subject to a New Source Performance Standard at 40 CFR 60, Subpart VVV, Standards of Performance for Polymeric Coating of Supporting Substrates Facilities. There are two levels of applicability in the NSPS, which are delineated, by a threshold level of 95 Mg of VOC's over a 12-month period. It should be noted here that this threshold value is for a liquid throughput mass of VOC and does not apply to the potential or actual emissions of that VOC. Also, this NSPS is a once-in-always-in performance standard. Kinyo's actual throughput of their primary VOC; Toluene, has been as high as 1600 Standard Tons of Toluene (VOC) since the first permit was issued in 1997. Since one Standard Ton is equivalent to 0.907 Metric Tons, it is evident that Kinyo, at $1600 \text{ Tons} \times 0.907 = 1451.2$ Metric Tons (Megagrams), is well over the 95 Mg threshold for inclusion in Subpart VVV requirements.

It is appropriate to list those applicable requirements, as they occur in the subject NSPS regulation here to clarify this one source of permit content.

40 CFR 60, Subpart VVV has the following requirements, listed by paragraph:

- 60.740 – Applicability and designation of affected facility.
- 60.741 – Definitions, symbols and cross-reference tables.
- 60.742 – Standards for volatile organic compounds.
- 60.743 – Compliance provisions.
- 60.744 – Monitoring requirements.
- 60.745 – Test Methods and Procedures.
- 60.746 – Permission to use alternative means of emission limitation.
- 60.747 – Reporting and recordkeeping requirements.
- 60.748 – Delegation of authority.

New Source Review and NSPS permit issued August 8, 2001, with amended page dated February 11, 2002 contains additional applicable requirements for the Title V renewal permit. A New Source Review permit issued June 1, 2005 for new surface grinding equipment has applicable requirements for inclusion in this amended Title V permit. Kinyo is also subject to a new MACT regulation; 40 CFR Part 63, Subpart OOOO. The MACT is more comprehensive than the NSPS now in effect. The new regulation offers a choice of methods to achieve compliance for Kinyo's Rubber Blanket operation. Kinyo has recently selected their preferred method to show compliance with the MACT. Existing facilities, like Kinyo became subject to the MACT on May 29, 2003, but have a compliance date that is three years later, or May 29, 2006. This Title V amendment will show how Kinyo will comply with the MACT.

COMPLIANCE ASSURANCE MONITORING

All of the emission units at a Title V facility that are major for a pollutant and meet other applicability criteria must be considered as facilities that may be subject to the CAM Rule. Kinyo has emissions units that are considered major for emissions of VOC. The web coating units are not major for PM10, and thus do not require any CAM provisions for the control of PM10. Periodic monitoring is appropriate in the case of pollutants not subject to the Rule. In the case of the web coating emission units at Kinyo, the CAM decision process is described below:

40 CFR 64.2 reads as follows for affected sources:

- Yes (a.) The requirements of this rule apply to Pollutant Specific Emission Units at a major source for that pollutant, at a facility that is subject to Title V permitting.
- Yes (1.) Does the emissions unit have pollutant emission limits in the permit?
- Yes (2.) Does the unit have a control device to achieve compliance with the emission limit or standard? (I.e., a fabric filter, condenser, carbon adsorber, etc).
- Yes, VOC (3.) Does the unit have a PTE for any pollutant that is equal to a major source?
- (b.) Exemptions
- (1.) Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following:
- No (i.) Emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 or the Act. The NSPS, Subpart VVV was actually promulgated September, 1989, so it was before the trigger date of the CAM Rule.
- Yes (vi.) Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in 64.1. The exemption provided in this paragraph (b)(1)(vi) shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (Kinyo uses a direct reading CEM, for Toluene as VOC concentration).

By examining the CAM Rule, it is evident that it should be applied only to the affected emissions units. Therefore, the Rule applies to the NSPS affected units, which are the only significant VOC emission units at this facility. Under 40 CFR 64.2 (b)(1)(vi) of the CAM Rule, the web coating and mixing equipment, subject to the NSPS, are found to be exempt because of the existence of the continuous compliance monitoring of the CEM. The facility complies with the CAM Rule in that it provides adequate monitoring and recordkeeping to continuously show compliance status.

The new surface grinder equipment has added a new emission unit that is subject to CAM for emissions of PM/PM-10. The NSPS and MACT do not address emissions of PM; so this new unit can not be considered exempt from Compliance Assurance Monitoring. The surface grinder exhibits all of the parameters that trigger CAM; major source level emissions prior to a control device; existence of a control device; and emission limits appear in the permit. Therefore, the CAM plan, included with the permit application has been modified to satisfy DEQ requirements for enforceability and attached to the Title V permit (see Attachment 'A').

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

FUTURE APPLICABLE REGULATIONS – Fabric Printing, Coating and Dyeing MACT; Part 63, Subpart OOOO

Kinyo is subject to the MACT requirements in the Web Coating MACT and will have until May 30, 2006, to meet the compliance option that is chosen. Kinyo submitted its plan to comply with the MACT before the deadline of May 30, 2005. The specific conditions that describe the MACT requirements are contained in Section V of the permit.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Equipment to be operated consists of:

Emission Unit ID	Vent and Stack ID	Emission Unit Description	Size/Rated Capacity*	Applicable Permit Date
Rubber Blanket Plant				
B1	BV1, S1	Weighing of Raw Materials	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B2	BV2, S2	Kneader -blender	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B3	BV3, S3	Open – mill	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B4a, B4b, B4c	BV4, S4; BV2, S2	Rubber pelletizers	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B5-B15	BV5-BV15	Mixers – rubber churning	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B16-B19	BV16-BV19	Coating & drying Chambers	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B20	BV20	Gyro sifter-surface dusting with talc	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B21-B23	BV21-BV23	Vulcanizers (curing)	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B24-B26	BV24-BV26	Surface grinders	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B27	BV27	Inspection & general cleaning	528,000 square meters of blanket production per year	August 8, 2001, amended February 11, 2002
B28	BV28, S13	Rubber blanket surface grinder	528,000 square meters of blanket production per year	June 1, 2005
Fuel Burning Equipment				
BLR-1	BLRV-1	Cleaver-Brooks #CB-700-250	250 HP boiler with heat input rating of 10.46 million Btu's per hour.	August 8, 2001, amended February 11, 2002

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Pollution Control Equipment Consists of:

Vent/Stack No.	Control Equipment Description	Manufacturer and Date of Construction	Size/Rated Capacity	Pollutants Controlled
BV1 – S1	BH1, fabric filter	Wheelabrator Canada, Inc. – 44WCC mod 36 D/C	99.5% efficient	PM
BV2 – S2	BH2, fabric filter	Wheelabrator Canada, Inc. – 33WCC mod 36 D/C	99.5% efficient	PM
BV3 – S3	BH3, fabric filter	Wheelabrator Canada, Inc. – 44WCC mod 36 D/C	99.5% efficient	PM
BV4 – S4	BH4, fabric filter	Wheelabrator Canada, Inc. – 32WCC mod 36 D/C	99.5% efficient	PM
BV5-B19, B27 – S5	CAS1, solvent recovery	Vara International PC-11490	95% efficient	VOC, HAP
BV20 – S6	BH5, fabric filter	Tokuju Kosakusho Co. – Gyro Sifter Type GS-B2	99.5% efficient	PM
B24, B25 – S8 – S11	BH6-BH9, fabric filter	NEC Automation, Inc. – BP-36-N	99.5% efficient	PM
B26 – S12	BH10, fabric filter	Amano Corp. – WRT-4064	99.5% efficient	PM
B28 – S13	BH11, fabric filter	Wheelabrator Modular Jet 3 Model 132 Series 6P	99.5% efficient	PM

EMISSIONS INVENTORY

A copy of the 2004 actual emission statement is attached. Emissions are summarized in the following tables.

2004 Actual Emissions

	2004 Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO ₂	PM ₁₀	NO _x
Total	51.7	2.6	0.02	0.24	3.1

2004 Facility Hazardous Air Pollutant/Toxics Emissions

Pollutant	2004 Hazardous Air Pollutant/Toxics Emission in Tons/Yr
Toluene	44.3
MEK (non-HAP)	0.09

EMISSION UNIT APPLICABLE REQUIREMENTS – Rubber Blanket Manufacturing Plant (Emission Unit Nos. B1 – B27)

Limitations

Following are limitations from the existing NSR/NSPS permit issued August 8, 2001, amended February 11, 2002:

Conditions 9, 10, 11, 12, and 13: limiting production and solvent throughput for Toluene, MEK, VM&P Naphtha and Isopropyl Alcohol.

Conditions 3, 4, 5 and 6: describe emission control methods

Condition 7: CEM requirement

Condition 8: specifications for providing test ports.

Condition 14: specification for the carbon adsorber.

Condition 15: specification for an exhaust duct flow rate device.

Conditions 16, 17, 18, 19 and 20: limiting criteria pollutant and HAP emissions.

Condition 21: limiting visible emissions (opacity limitation).

Condition 31: requires the facility to shutdown if their emissions increase because of a bypass or malfunction of the process.

Condition 32: requires that the facility adjust the level of operation to avoid violating any primary ambient air quality standard.

Condition 33: Maintenance/Operating Procedures to minimize excess emissions.

Condition 36: requiring registration and updates.

Monitoring

Following are requirements for monitoring from the existing NSR/NSPS permit issued August 8, 2001, as amended February 11, 2002 and requirements from 40 CFR 60.13:

Conditions 23 and 24: monitoring requirements for the VOC – CEM and the requirements for a monitor quality control program.

Notifications

Following are notification requirements from the existing NSR/NSPS permit issued August 8, 2001, as amended February 11, 2002:

Conditions 25 and 26: for control equipment maintenance or malfunction notifications.

Recordkeeping

Following are recordkeeping requirements from the existing NSR/NSPS permit issued August 8, 2001, as amended February 11, 2002:

Condition 27: requiring records of production, throughputs and monitoring data for the carbon adsorber system parameters.

Reporting

Following are reporting requirements from the existing NSR/NSPS permit issued August 8, 2001, as amended February 11, 2002 and requirements from 40 CFR 60, Subpart VVV:

Conditions 28 and 29: require submission of operating records for the continuous monitoring system, including excess emissions, out time for the CEM and quarterly reports required by the NSPS.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80: New Source Standard for Visible Emissions

Testing

The permit does not require source tests. A table of test methods has been included in the permit if testing is performed. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Emission Unit Applicable Requirements – NSPS boiler – BLR-1

Conditions have been included for the Subpart Dc boiler including a requirement for keeping records of fuel usage, operation and training, and approved fuel.

EMISSION UNIT APPLICABLE REQUIREMENTS – Surface Grinder Unit B28

Limitations

Following are limitations from the existing NSR permit issued June 1, 2005:

Condition 5: limiting production for the surface grinder.

Condition 3: describes emission control methods.

Condition 4: monitoring requirements.

Condition 6: limiting criteria pollutant (PM) emissions

Condition 7: limiting visible emissions (opacity limitation).

Recordkeeping

Following are recordkeeping requirements from the existing NSR permit issued June 1, 2005:

Condition 8: requiring records of throughput and maintenance/training records.

General Conditions

Following are general requirements from the existing NSR permit issued June 1, 2005:

Condition 11: requires that the facility adjust the level of operation to avoid violating any primary ambient air quality standard

Condition 12: Maintenance/Operating Procedures to minimize excess emissions.

Condition 15: requiring registration and updates.

NESHAP Requirements – 40 CFR 63, Subpart OOOO

Following are requirements for compliance with the MACT for web coating/printing - Section V of Title V permit.

Condition 1: identifies the regulation and the mandated compliance date.

Condition 2: describes the compliance option selected by Kinyo

Condition 3: summarizes the Work Practice Plan required by the MACT.

Condition 4: a Startup, Shutdown and Malfunction (SSM) plan from 40 CFR 63.4300 (c).

Condition 5: notifications and reports required by the MACT.

Condition 6: methodology for the Initial Compliance Demonstration from 40 CFR 63.4341.

Condition 7: recordkeeping to show initial compliance for 40 CFR 63.4312 and 63.4313.

Streamlined Requirements

There are no streamlined requirements for this permit.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement NO. 3-2001”.

This general condition cite(s) the Article(s) that follow(s):

Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-80. Application

9 VAC 5-80-140. Permit Shield

9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas]

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

There are no state-only applicable requirements for this facility.

FUTURE APPLICABLE REQUIREMENTS – Compliance with the MACT

The facility is a major source of hazardous air pollutants (toluene). Maximum achievable control technology standards (MACT) for Printing, Coating and Dyeing of Fabrics and Other Textiles (40 CFR 63, Subpart OOOO) now apply to this facility. This rule was promulgated by the EPA on May 29, 2003. The facility will need to be in compliance with the MACT requirements as of the compliance date of May 30, 2006.

INAPPLICABLE REQUIREMENTS

Tanks previously subject only to recordkeeping and reporting under 40 CFR 60, Subpart Kb have been exempted by EPA's recent amendment of Subpart Kb (see Wednesday, October 15, 2003, Federal Register, attached).

COMPLIANCE PLAN

There is no compliance plan for this facility.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
BLR-1	Cleaver Brooks Boiler	5-80-720 C.2.a	PM, NO _x , PM ₁₀ , CO	5.23 mmBtu/hour
BLR-2	Cleaver Brooks Boiler	5-80-720 C.2.a	PM, NO _x , PM ₁₀ , CO	5.23 mmBtu/hour
SES-1	Solvent Evaporation System	5-80-720 B.5.	VOC (Toluene, MEK)	less than 5 tons/yr
TANK-1	Solvent Storage Tank	5-80-720 B.5.	VOC (Toluene, MEK)	less than 5 tons/yr
PLCM-1	Pilot Laboratory Coating Machine	5-80-720 B.5.	VOC (Toluene, MEK)	less than 5 tons/yr

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Daily Press from March 23, 2006 to April 22, 2006.